#### **Generate Collection Print**

L2: Entry 3 of 5

File: USPT

Mar 12, 2002

US-PAT-NO: 6356905

DOCUMENT-IDENTIFIER: US 6356905 B1

TITLE: System, method and article of manufacture for mobile communication utilizing

an interface support framework

DATE-ISSUED: March 12, 2002

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY

Gershman; Anatole Vitaly Chicago IL Swaminathan; Kishore Sundaram Downers Grove ILMeyers; James L. Chicago ILEvanston IL

Fano; Andrew Ernest

ASSIGNEE-INFORMATION: STATE ZIP CODE COUNTRY TYPE CODE

Accenture LLP Palo Alto CA 02

APPL-NO: 09/ 263252 [PALM] DATE FILED: March 5, 1999

INT-CL: [07] G06 F 17/30

US-CL-ISSUED: 707/10; 707/3, 707/5, 707/102, 705/26, 705/35, 709/203, 709/219 US-CL-CURRENT: 707/10; 705/26, 705/35, 707/102, 707/3, 707/5, 709/203, 709/219

FIELD-OF-SEARCH: 707/3, 707/4, 707/10, 707/102, 707/5, 235/462, 235/472, 705/26,

705/35, 709/203, 709/219

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

Search Selected Search ALL

		_	
PAT-NO	ISS DATE	PATENTEE-NAME	US-CL
5067166	November 1991	Ito	382/37
5220625	June 1993	Hatakeyama et al.	382/54
5404510	April 1995	Smith et al.	395/600
5412806	May 1995	Du et al.	395/600
5471677	November 1995	Imanaka	395/600
5511190	April 1996	Sharma et al.	395/600
<u>5778368</u>	July 1998	Hogan et al.	707/10
<u>5778378</u>	July 1998	Rubin	707/103
5848404	December 1998	Hafner et al.	707/3
6169992	January 2001	Beall et al.	707/103
<u>6269368</u>	July 2001	Diamond	707/6
6285998	September 2001	Black et al.	707/4

#### OTHER PUBLICATIONS

"Deriving a Heuristic Function of an A\* Search for Optimal Reducers in Query Processing", IBM Technical Disclosure Bulletin, vol. 33, No. 7, Dec. 1990, pp. 454-457.

"Display of Graphical Query Results", IBM Technical Disclosure Bulletin, vol. 37, No. 11, Nov. 1994, pp. 225-227.

PRIMARY-EXAMINER: Mizrahi; Diane D.

ASSISTANT-EXAMINER: Mofiz; Apu

ATTY-AGENT-FIRM: Hall; David A. Heller, Ehrman, White & McAuliffe

#### ABSTRACT:

A system and method associates a label and description with a search query such that the query, label, and description can be stored in a shared query repository so that queries can be retrieved by multiple users for reuse. The shared query repository can be searched, so that an appropriate query can be located, retrieved, and then submitted for execution over a document database by a search engine. Retrieved queries can be combined with other retrieved queries or modified with new search terms, and the new combined search query can be used for a new search on the database. The database search system and method efficiently permits reuse of search queries and facilitates sharing of search strategies.

34 Claims, 11 Drawing figures

2 of 2 6/16/03 9:07 Al

#### **Generate Collection Print**

L2: Entry 2 of 5

File: USPT

Oct 1, 2002

US-PAT-NO: 6460034

DOCUMENT-IDENTIFIER: US 6460034 B1

TITLE: Document knowledge base research and retrieval system

DATE-ISSUED: October 1, 2002

INVENTOR-INFORMATION:

NAME

CITY

STATE

ZIP CODE

COUNTRY

Wical; Kelly

San Carlos

CA

ASSIGNEE-INFORMATION:

NAME

CITY

STATE ZIP CODE COUNTRY TYPE CODE

Oracle Corporation

Redwood Shores

CA

02

APPL-NO: 08/ 861961 [PALM] DATE FILED: May 21, 1997

INT-CL: [07] G06 F 17/30

US-CL-ISSUED: 707/5 US-CL-CURRENT: 707/5

FIELD-OF-SEARCH: 707/1-5

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

Search Selected

Search ALL

	PAT-NO	ISSUE	PATENTEE-NAME	US-CL
	5159667	October 1992	Borrey et al.	395/148
	5167011	November 1992	Priest	395/54
ä	5257185	October 1993	Farley et al.	364/419.19
n	5276616	January 1994	Kuga et al.	364/419.08
n	5325298	June 1994	Gallant	364/419.19
	5369763	November 1994	Biles	395/600
	5418948	May 1995	Turtle	707/4
	5418961	May 1995	Segal et al.	707/1
	5442780	August 1995	Takanashi et al.	395/600
	5488725	January 1996	Turtle et al.	707/5
	5544049	August 1996	Henderson et al.	704/7
	5598557	January 1997	Doner et al.	707/5
	5619709	April 1997	Caid et al.	707/532
	5625767	April 1997	Bartell et al.	395/140
	5630117	May 1997	Oren et al.	395/602
	5630125	May 1997	Zellweger	395/614
	5634051	May 1997	Thomson	707/5
	5642502	June 1997	Driscoll	707/5
	5675819	October 1997	Schuetze	704/10
	5708829	January 1998	Kadashevich et al.	707/5
	5717914	February 1998	Husick et al.	707/5
	5721902	February 1998	Schultz	707/4
	5724567	March 1998	Rose et al.	707/2
	5761418	June 1998	Francis et al.	395/200.31
	<u>5768578</u>	June 1998	Kirk et al.	707/100
	5787234	July 1998	Molloy	706/46
	<u>5787417</u>	July 1998	Hargrove	707/4
	5819258	October 1998	Vaithyanathan et al.	707/2
	5842206	November 1998	Sotomayor	707/5
	5875446	February 1999	Brown et al.	707/3
	5956708	September 1999	Dyko et al.	707/3
	5963940	October 1999	Liddy et al.	707/5
	5978799	November 1999	Hirsch	707/4
	6006221	December 1999	Liddy et al.	707/5
	6026388	February 2000	Liddy et al.	707/1

# OTHER PUBLICATIONS

Liddy, Elizabeth D. et al., "DR-LINK System: Phase I Summary" Proceedings of the

2 of 3 6/16/03 9:07 AN

TIPSTER, Syracuse Un., NY, Sep. 1993, pp. 93-110, 1 .\*
Liddy, Elizabeth D. et al., "DR-LINK: A System Update For TREC-2," TREC Text
Retrieval Conf, NIST, Wash., D.C., Aug. 1993, pp. 85-99.\*
S. Al-Hawamdeh, "Compound Document Processing," Proc. of the 15.sup.th Annual
Internat'l Computer Software & Applications Conf., Sep. 1991, p. 640-4.\*
Cox, John "'Text-Analysis' Server to Simplify Queries", Communications Week, Apr.
19, 1993.

ART-UNIT: 2171

PRIMARY-EXAMINER: Von Buhr; Maria N.

ATTY-AGENT-FIRM: Stattler Johansen & Adeli LLP

#### ABSTRACT:

A knowledge base search and retrieval system, which includes factual knowledge base queries and concept knowledge base queries, is disclosed. A knowledge base stores associations among terminology/categories that have a lexical, semantical or usage association. Document theme vectors identify the content of documents through themes as well as through classification of the documents in categories that reflects what the documents are primarily about. The factual knowledge base queries identify, in response to an input query, documents relevant to the input query through expansion of the query terms as well as through expansion of themes. The concept knowledge base query does not identify specific documents in response to a query, but specifies terminology that identifies the potential existence of documents in a particular area.

25 Claims, 22 Drawing figures

3 of 3 6/16/03 9:07 AN

# Generate Collection Print

L2: Entry 1 of 5

File: USPT

Nov 19, 2002

US-PAT-NO: 6484162

DOCUMENT-IDENTIFÍER: US 6484162 B1

TITLE: Labeling and describing search queries for reuse

DATE-ISSUED: November 19, 2002

INVENTOR - INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY

Edlund; Stefan B. Sunnyvale CA
Emens; Michael Lawrence San Jose CA
Kraft; Reiner Morgan Hill CA
Yim; Peter Chi-Shing San Francisco CA

ASSIGNEE-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY TYPE CODE

International Business Machines Corporation Armonk NY 02

APPL-NO: 09/ 342991 [PALM] DATE FILED: June 29, 1999

INT-CL: [07] G06 F 17/30

US-CL-ISSUED: 707/3; 707/5 US-CL-CURRENT: 707/3; 707/5

FIELD-OF-SEARCH: 707/1, 707/3, 707/9, 707/10, 707/4, 707/104, 707/5, 707/500, 707/533, 707/2, 707/103, 707/6, 382/54, 705/10, 705/26, 705/2, 705/35, 705/39, 706/45, 706/46, 709/229, 709/313

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

Search Selected

Search ALL

1 of 2

	PAT-NO	ISSUDATE		PATENTEE-NAME		US-CL
	5279882	January 19	94	Daude et al.		428/192
	5519608	May 1996		Kupiec		364/419.08
	5606602	February 1	997	Johnson et al.		379/115
	5640193	June 1997		Wellner		348/7
	5673322	September	1997	Pepe et al.		389/49
	5732074	March 1998		Spaur et al.		370/313
	5850442	December 1	998	Muftic		380/21
	5854624	December 1	998	Grant		345/169
	5913210	June 1999		Call		707/4
	5937163	August 199	9	Lee et al.		395/200.48
	5938727	August 199	9	Ikeda		709/218
	5950173	September	1999	Perkowski		705/26
	5971277	October 19	99	Cragun et al.		235/462.01
	5978773	November 1	999	Hudetz et al.		705/23
	5979757	November 1	999	Tracy et al.		235/383
n	5992752	November 1	999	Wilz, Sr. et al	•	235/472.01
n	6134548	October 20	00	Gottsman et al.		707/5
n	6202062	March 2001		Cameron et al.		707/3
******						
			FOREIGN	PATENT DOCUMENTS	,	
	IGN-PAT-NO		PUBN-DATE		COUNTRY	US-CL
0 85 0883	3 287		July 1998 December 1998		EP	
0890			January 1999		EP	
	7/17815		May 1997		WO	
WO/9	7/40451		October 1997		WO	
	7/45814		December 1997		WO	
WO 98/03923		January 1998		MO		
WO 98/06055 WO 98/10541		February 1998 March 1998		WO WO		
	•		March 1998 March 1998		WO	
WO 98/11744 WO 98/12833		March 1998		WO		
WO 98/24036		June 198		WO		
WO 98/24050		June 1998		WO		
98/35469		August 1998		WO		
WO 98/39909		September 1998		WO		
WO 98/40823		September 1998		WO WO		
WO 98/49813 WO 98/52371		November 1998 November 1998		WO		
98/47295		December 1998		WO		
WO 98/57474		December 1998		WO		
WO 98/58476		December 1998		WO		

January 1999

WO

#### OTHER PUBLICATIONS

D. Brugali, "Techniques to build and reuse assets", Practical Software Reuse, ESSI-Surprise 1998, pp. 7-1 to 7-11.

D. Brugali et al., "Agent technology: a new frontier for the development of application frameworks?", Object-Oriented Application Frameworks, Wiley 1998, 9 pp. Falchuk et al., "AgenSys: A Mobile Agent System for Digital Media Access and Ineraction on an Internet", Univ. of Ottawa, Dept. of El. and Comp. Eng., 1997, pp. 1876-1880. U. S. patent application Ser. No. 09/263,969, filed Mar. 5, 1999, "Mobile Communication and Computing System and Method". U. S. patent application Ser. No. 09/263,927, filed Mar. 5, 1999, "Mobile Communication System and Method for A Shopper Agent". U. S. patent application Ser. No. 09/263,926, filed Mar. 5, 1999, "A System, Method and Article of Manufacture for Advanced Mobile Health Care Processing". U. S. patent application Ser. No. 09/263,920, filed Mar. 5, 1999, "Dynamic Configuration System and Method for A Mobile Communication Network". U. S. patent application Ser. No. 09/263,251, filed Mar. 5, 1999, "A System for Utilizing A Transaction Interface in A Mobile Communication Network". U. S. patent application Ser. No. 09/272,828, filed Mar. 19, 1999, "System and Method for Inputting, Retrieving, Organizing and Analyzing Data". Bob Emmerson; The Mobile Intranet: The next generation of GSM services will offer faster data rates and smarter messaging; May 1998; BYTE Magazine, pp. 1-7. Timo Alanko, Markku Kojo, Mika Liljeberg, Kimmo Raatikainen; Mobile access to the Internet: a mediator-based solution; Internet Research: Electronic Networking Applications and Policy vol. 9, No. 1, pp. 58-65, 1999. Andrezej Duda, Stephane Perret; A Network Programming Model for Mobile Applications nd Information Access; Proceedings JENC7, pp. 141.1-149.9, DATE 7. Chu-Sing Yang, Kun-da Wu, Chun-Wei Tseng; Support an Efficient Connection for Mobile IP; Proceedings, Ninth International Workshop on Database and Expert Systems Applications; Aug. 1998, IEEE, Computer Society, pp. 514-519.
Mary Cameron Cupito; Emerging technologies: Has Their time come? Enterprise Integration; Health Management Technology; Dec. 1998, pp. 12-16. Toh Han Shih; Online life-line; Wired for Business; Singapore Business Times; Dec. 1998, pp. ?. Chris Bradley; Remote and Mobile Computing With TCP/IP; Enterprise Systems Journal; pp. 38-48. Enhanced Services: Telecom customers will soon have one-stop, easy-to-use access to their services portfolio form anywhere, at any time, and in any way; EDGE, on & about AT&T; May 1997, pp. 1-2, Authors?. Nokia, Ericsson, Unwired Planet and Motorola unite to create an open common protocol for interactive wireless applications; Jun. 26, 1997, pp. 1-3. Unisource in GSM trial of mobile electronic banking and shopping; Mobile Communications; Mar. 20, 1997, pp. 1-3, Authors?. Dynamic Mobile Data Announces Mobile Server Wireless Solution For Enterprise and internet Access; Mar. 1999, pp. 1-2, Authors?. Philip R. Cohen, Adam Cheyer, Michelle Wang, Soon Cheol Baeg; An Open Agent Architecture; Software Agent Papers, AAAI Spring Symposium 1994, pp. 1-129. Katia Sycara, Anandeep S. Pannu; The RETSINA Multiagent System: Towards Integrating Planning, Execution and Information Gathering; Proceedings of the Second International Conference on Autonomous Agents, May 1998, pp. 350-351.

ART-UNIT: 2777

PRIMARY-EXAMINER: Homere; Jean R.

ATTY-AGENT-FIRM: Morrison & Foerster LLP

#### ABSTRACT:

A system is disclosed that facilitates web-based information retrieval and display system. A wireless phone or similar hand-held wireless device with Internet Protocol capability is combined with other peripherals to provide a portable portal into the Internet. The wireless device prompts a user to input information of interest to the user. This information is transmitted a query to a service routine (running on a Web server). The service routine then queries the Web to find price, shipping and availability information from various Web suppliers. This information is then available for use by various applications through an interface support framework.

# Generate Collection Print

L2: Entry 4 of 5

File: USPT

Nov 27, 2001

US-PAT-NO: 6324536

DOCUMENT-IDENTIFIER: US 6324536 B1

\*\* See image for Certificate of Correction \*\*

TITLE: Method and system for providing interactive electronic catalog for product and constraint information of equality and inequality search

DATE-ISSUED: November 27, 2001

INVENTOR-INFORMATION:

NAME

CITY

STATE

ZIP CODE COUNTRY

Rofrano; John J.

Mahopac

NY

ASSIGNEE-INFORMATION:

NAME

CITY STATE ZIP CODE COUNTRY TYPE CODE

International Business Machines

Corporation

Armonk NY

02

#### PARENT-CASE:

CROSS-REFERENCE TO RELATED APPLICATION The present application claims priority to co-pending U.S. Provisional Application Serial No. 60/053,345 which was filed on Jul. 22, 1997.

INT-CL: [07] G06 F 17/30

US-CL-ISSUED: 707/5; 707/3, 707/102, 707/104, 705/26, 705/27, 345/968 US-CL-CURRENT: 707/5; 345/968, 705/26, 705/27, 707/102, 707/104.1, 707/3

FIELD-OF-SEARCH: 707/1, 707/2, 707/3, 707/4, 707/5, 707/6, 707/7, 707/8, 707/9, 707/10, 707/100-104, 707/501, 707/513, 707/516, 707/908, 707/526, 707/500, 705/10, 705/22, 705/27, 705/28, 705/26, 345/333-335, 345/968

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

Search Selected

Search ALL

PAT-NO	IS DE-DATE	PATENTEE-NAM	US-CL
5410692	April 1995	Torres	707/3
5710887	January 1998	Chelliah et al.	705/26
5715444	February 1998	Danish et al.	707/4
5734888	March 1998	Li et al.	707/4
5740425	April 1998	Povilus	707/100
<u>5751286</u>	May 1998	Barber et al.	345/348
5761655	June 1998	Hoffiman	707/4
5819092	October 1998	Ferguson et al.	395/701
5832496	November 1998	Anand et al.	707/102
6076091	June 2000	Fohn et al.	707/102

ART-UNIT: 217

PRIMARY-EXAMINER: Choules; Jack

ASSISTANT-EXAMINER: Channavajjala; Srirama

ATTY-AGENT-FIRM: Ellenbogen; Wayne L. Dougherty; Anne Vachon

#### ABSTRACT:

A system for collecting, categorizing and searching metadata about products which may be the subject of user-input inequality searches. Unique methods are provided for: generating image information at the user interface; inputting of the inequality search; conducting an inequality search based on the metadata in response to input at the user interface; and; displaying the search results appropriately.

21 Claims, 6 Drawing figures

## **End of Result Set**

Generate Collection Print

L2: Entry 5 of 5 File: USPT Sep 28, 1999

US-PAT-NO: 5960411

DOCUMENT-IDENTIFIER: US 5960411 A

TITLE: Method and system for placing a purchase order via a communications network

DATE-ISSUED: September 28, 1999

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY

Hartman; Peri Seattle WA
Bezos; Jeffrey P. Seattle WA
Kaphan; Shel Seattle WA
Spiegel; Joel Seattle WA

ASSIGNEE-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY TYPE CODE

Amazon.com, Inc. Seattle WA 02

APPL-NO: 08/ 928951 [PALM]
DATE FILED: September 12, 1997

INT-CL: [06] G06 F 17/60

US-CL-ISSUED: 705/26; 705/27, 345/962 US-CL-CURRENT: 705/26; 345/962, 705/27

FIELD-OF-SEARCH: 705/26, 705/27, 380/24, 380/25, 235/2, 235/375, 235/378, 235/381,

395/188.01, 345/962

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

Search Selected Search ALL

1 of 3 6/16/03 9:08 AN

PAT-NO	IS: DATE	PATENTEE - NAM	US-CL
4937863	June 1990	Robert et al.	380/4
5204897	April 1993	Wyman	380/4
<u>5260999</u>	November 1993	Wyman	384/4
5627940	May 1997	Rohra et al.	395/12
5640501	June 1997	Turpin	395/768
<u>5640577</u>	June 1997	Scharmer	395/768
5664111	September 1997	Nahan et al.	705/27
5715314	February 1998	Payne et al.	380/24
<u>5715399</u>	February 1998	Bezos	705/27
5727163	March 1998	Bezos	705/27
5745681	April 1998	Levine et al.	395/200.3
5758126	May 1998	Daniels et al.	395/500

#### FOREIGN PATENT DOCUMENTS

FOREIGN-PAT-NO	PUBN-DATE	COUNTRY	US-CL
0855687 A2	January 1998	EP	
0855659 A1	January 1998	EP	
0845747A2	June 1998	EP	
0883076A2	December 1998	EP	
WO 95/30961	November 1995	WO	
WO 96/38799	December 1996	WO	
WO 98/21679	May 1998	WO	

### OTHER PUBLICATIONS

```
Jones, Chris. "Java Shopping Cart and Java Wallet; Oracles plans to join e-commerce
initiative." Mar. 31, 1997, InfoWorld Media Group.
"Pacific Coast Software Software creates virtual shopping cart." Sep. 6, 1996. M2
Communications Ltd 1996.
"Software Creates Virtual Shopping Cart." Sep. 5, 1996. Business Wire, Inc.
Terdoslavich, William. "Java Electronic Commerce Framework." Computer Reseller News, Sep. 23, 1996, CMP Media, Inc., 1996, pp. 126, http://www.elibrary.com/id/101/101/getdoc . . . rydocid=902269@library.sub.--d&dtype=0.about.0&dinst=. [Accessed Nov. 19, 1998].
"Internet Access: Disc Distributing Announces Interactive World Wide." Cambridge
Work-Group Computing Report, Cambridge Publishing, Inc., 1995,
http://www.elibrary.com/id/101/101/getdoc . . . docid=1007497@library.sub.--
a&dtype=0.about.0&dinst=0. [Accessed Nov. 19, 1998].
Nance, Barry, "Reviews: A Grand Opening for Virtual Storefront With Middleware."
Jun. 1, 1997, CMP Media, Inc. 1997, p. 80, http://www.elibrary.com/getdoc.egi?id=117
     . docid=1257247@library.sub.-- a&dtype=0.about.0&dinst=0. [Accessed Nov. 19,
1998].
"Go-Cart Shopping Cart Software Features." 1996 GO International, Inc.
http://www.go-cart.com/features.html. [Accessed Nov. 19, 1998].
"PerlShop Manual (version 2.2)." 1996, ARPAnct Corp.
http://www.w3u.com/grokksoft/shop/perlman.html. [Accessed Nov. 19, 1998].
"Sax Software Announces Sax NetSell; Sax NetSell's design-time ActiveX controls make
Internet commerce easy. "1997, Sax Software Corp.
Baron, Chris and Bob Weil, "Implementing a Web Shopping Cart," Dr. Dobb's Journal,
Sep. 1996, pp. 64, 66, 68-69, and 83-85.
Hoque, Reaz, "A Shopping Cart Application with JavaScript," Web Techniques, May
1998, pp. 63, 65-66, and 68.
```

ART-UNIT: 274

PRIMARY-EXAMINER: Trammell; James P.

ASSISTANT-EXAMINER: Smith; Demetra R.

ATTY-AGENT-FIRM: Perkins Coie LLP

### ABSTRACT:

A method and system for placing an order to purchase an item via the Internet. The order is placed by a purchaser at a client system and received by a server system. The server system receives purchaser information including identification of the purchaser, payment information, and shipment information from the client system. The server system then assigns a client identifier to the client system and associates the assigned client identifier with the received purchaser information. The server system sends to the client system the assigned client identifier and an HTML document identifying the item and including an order button. The client system receives and stores the assigned client identifier and receives and displays the HTML document. In response to the selection of the order button, the client system sends to the server system a request to purchase the identified item. The server system receives the request and combines the purchaser information associated with the client identifier of the client system to generate an order to purchase the item in accordance with the billing and shipment information whereby the purchaser effects the ordering of the product by selection of the order button.

26 Claims, 12 Drawing figures